

- contain leaks and explosions, and to withstand the impact of an earthquake.
- A state-of-the-art pollution abatement system cools and thoroughly cleans the air emissions, and ensures that emissions meet or exceed clean air regulations set by state and federal laws.
- The carbon filtration system thoroughly cleans plant air emissions before they are released into the environment.
- Thousands of air samples are taken and tested daily inside the plant and emission stack to ensure that no detectable chemical agent is present.
- As an added protection unique to the Umatilla Chemical Agent Disposal Facility, the Army monitors air, soil and water samples throughout the region, as far away as the Blue Mountains, to ensure that no contamination is present.
- Similar to many other industrial processes, chemical weapons disposal produces waste byproducts, such as: scrap metal, brine solution and ash. These wastes are treated and checked to ensure that all chemical agent has been destroyed. The wastes are then sent to approved hazardous waste landfills.
- The Oregon Department of Environmental Quality, U.S. Environmental Protection Agency, National Research Council and the Centers for Disease Control and Prevention all oversee the Umatilla Chemical Agent Disposal Facility. Their participation in the project ensures that the Army continues to provide maximum protection to the local community, workers and the environment.

### A Chemical Weapon's Path to Disposal



Chemical weapons are stored in earth-covered, concrete-and-steel buildings called igloos. These igloos are guarded and monitored constantly for any signs of leaking weapons.



Step 2

Chemical weapons are taken from the igloos to the disposal plant in sealed on-site containers, known as ONCs, that are resistant to fire and impact.



#### Step 3

When the containers arrive at the disposal plant, workers check the containers for leaking weapons before opening them. Crews then load the weapons onto conveyors that carry the weapons through the disposal process.

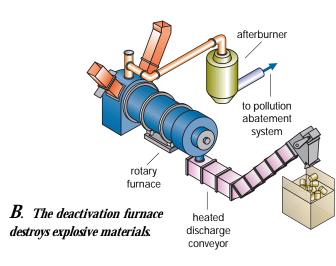


#### Step 4

From this point on, workers manage the disposal process from an enclosed control room using advanced robotics, computer technology and video monitoring equipment. Automatic, robotic equipment drains the chemical agent from the munitions and takes the weapons apart in explosion-proof rooms.

#### Step 5

Once dismantled and drained, the individual weapon parts travel to different furnaces in the plant, each designed for a specific purpose. see illustrations A, B and C



### Umatilla Chemical Stockpile

#### **Stockpile Configuration**

M55 Rockets

Bombs

**Projectiles** 

Land Mines

**Bulk Containers** 

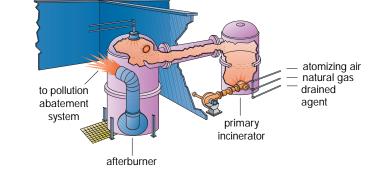
Aerial Spray Tanks

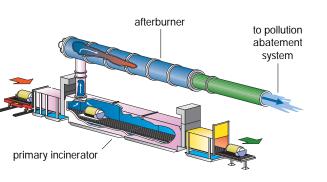
#### **Chemical Agent Types**

Nerve (VX, GB)

Blister (HD, mustard)

#### A. The liquid incinerator destroys the chemical agent.





C. The metal parts furnace heats shell casings and other heavy metal parts to destroy any remaining agent contamination.



#### Step 6

The Pollution Abatement System thoroughly cleans the air before it is released into the environment.

Come see for yourself and get involved with chemical weapons

#### Visit the Umatilla Chemical Disposal

The outreach office has models of ammunition that is stored at the Depot. a model of the disposal facility and many other exhibits, fact sheets, photos and videos. Outreach office staff can arrange for speakers from the Umatilla Chemical Agent Disposal Facility to come and speak to your group or organization. Visitors also are invited to participate in information sessions and discussions where they can ask questions and provide input on the program.

#### Join us on a tour of the Umatilla **Chemical Depot and Disposal Facility** Held each month, the two-hour tour is ideal for individuals or families who want to learn more about activities at the Umatilla Chemical Depot. Tour stops include visits to an empty storage igloo, the Depot's operations center and to the Umatilla Chemical Agent Disposal Facility. Visitors will also see displays of ammunition models, mobile monitoring equipment and protective masks and suits. Call the outreach office to schedule a tour.

The success of the Army's Chemical Stockpile Disposal Project relies on building and strengthening partnerships

between the Army and the communities

surrounding the Umatilla Chemical Depot. Based on comments and input from the community, the

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Army supports new directions for incorporating

community views into the program.



The disposal facility will be completed in the following phases:

**Construction** of the disposal facility will last approximately three years.

**Systemization** (testing exercises) will overlap with construction. Prior to operations, the plant will undergo a series of final tests to ensure that the plant, procedures and workers will be ready for the actual disposal of chemical weapons.

**Operations** are scheduled to last approximately four years. More than 650 scientists, engineers and technicians will operate and maintain the disposal plant.

Closure of the disposal facility will take one to two years. By law, no materials other than chemical weapons can be processed through the plant, and the disposal facility must be dismantled when the chemical weapons are gone.

Why dispose of chemical weapons?

- The need for the stockpile no longer exists.
- The risk of storage increases with time as the stockpile slowly deteriorates.
- Congressional mandate and international treaty the Chemical Weapons Convention require destruction of the weapons.

Building on past experience, the Army based the Umatilla Chemical Agent Disposal Facility design on proven chemical weapons disposal facilities at Johnston Atoll in the Pacific Ocean and at the Deseret Chemical Depot in Utah. The Army has safely destroyed millions of pounds of chemical agent at these facilities since 1990.

Each year, the Army moves closer to its goal of safely eliminating chemical weapons at the Umatilla Chemical Depot and other storage sites across the United States. In partnership with the community, the Army's highest priority is protecting facility workers, surrounding communities and the environment.



Nore Information

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## UMATILLA





# ntroduction

Eastern Oregon is home to one of the most advanced industrial facilities in the world. The Umatilla Chemical Agent Disposal Facility will destroy nearly seven and a half million pounds of chemical agent stored there since 1962. Through careful planning and extraordinary dedication to the safety of communities, workers and the environment, the U.S. Army Program Manager for Chemical Demilitarization is working in partnership with local communities to make Oregon a safer place to live – free from the legacy of chemical weapons.

Construction of the Umatilla Chemical Agent Disposal Facility began in June 1997. Located approximately eight miles west of Hermiston, Oregon, the 30-acre site at Umatilla Chemical Depot includes eight buildings totaling 189,200 square feet.